# Classical Cottage Consortium, Inc. 2024-2025 UPPER LEVEL COURSE DESCRIPTIONS 

Unless otherwise noted, all classes are offered for one hour, one day a week for $\mathbf{3 2}$ weeks. Tuition is based on a minimum of $\mathbf{1 0}$ students and may be adjusted for lower enrollment. These courses are intended for mature middle school or high school students and are organized below according to subject area.

SPECIAL NOTE for any courses designed to help students prepare for AP exams: We are fortunate to have these designated courses taught by teachers who are both well-qualified and experienced in teaching within their fields of study. Often the course syllabi are in sync with College Board curricular parameters, and many of our students have been highly successful on the Advanced Placement (AP) exams listed for these courses. However, in order to support students in preparation for these exams, parents will need to 1) be responsible for early fall exam registration at their respective local high school or for researching to find another high school that is administering the desired test, 2) purchase test-specific study materials, and 3) structure regular independent study for review purposes. A meeting to give parents a more detailed orientation to AP exams will be offered during the school year.

## CLASSICAL CORE COURSE STRANDS:

The Classical Cottage Consortium Upper Level curriculum has three core course strands that offer our students a robust classical education, both in content and methodology. Each strand comprises five or six years of concurrent study and the courses within each strand are offered in cycles. Please see the earlier page titled "Overview of Upper Level Core Strands" in this Registration Packet for more information.

NOTE ABOUT OUR LATIN CLASSES: If you intend to enter the C3 Latin program mid-series (with enrollment in a class other than a beginning, entry-level class), you will need to contact the Registrar to request an exception from the Board before registering.

## Latin 1/3

Molaika Beer
Prerequisites: strong reading \& writing skills with knowledge of basic English grammar
Ages: 9-12
Tuition: $\$ 260.00$
Materials Fee: $\$ 25$ (additional purchase of textbook and workbook required)
Estimated Homework Time: 30-45 minutes per day (or 3 hours per week)

This is the first of a three-year sequence of Latin I for younger students who are ready to begin tackling Lingua Latina at a slower pace than the Latin $1 / 2$ track. Students in the Latin $1 / 3$ course will complete chapters $1-8$ of the textbook. Students should be able to read and write well. A parent is required to attend the class with the student. Homework will require 30-45 minutes of focused Latin study every day, and students will need a great deal of assistance at home.

## Latin 3/3 Nancy Juday

Prerequisites: C3 Latin 2/3 (if student has not taken C3 Latin 2/3, special permission is required to enroll in this class)
Tuition: $\$ 260.00$
Materials Fee: $\$ 25$ (additional purchase of textbook and workbook required)
Estimated Homework Time: 1 hour per day (or 4 hours per week)
This is the last of a three-year sequence of Latin I for younger students who are tackling Lingua Latina at a slower pace than the Latin $1 / 2$ track. This year students will work through chapters $17-24$ of the text. Students must have completed Lingua Latina (through chapter 16) successfully in order to register for this course. A parent is required to attend the class with the student. Homework will require 45 minutes to 1 hour of focused Latin study every day, and students likely will need a great deal of assistance at home.

Latin 2/2
Jennifer Hoffman
Prerequisites: C3 Latin 1/2 (if student has not taken C3 Latin 1/2, special permission is required to enroll in this class)
Tuition: $\$ 260.00$
Materials Fee: $\$ 25$ (additional purchase of textbook and workbook required)
Estimated Homework Time: 1 hour per day (or 4 hours per week)
This year-long course is the second half of Latin I for middle school or high school students. Chapters 13-24 of Lingua Latina will be covered in this course which, together with Latin $1 / 2$, equals one high school credit for foreign language. A parent is required to attend class with the student so that proper assistance can be given at home. Homework will require approximately 1 hour of focused Latin study every home study day, and students will likely need a great deal of assistance at home.

Latin III
Jennifer Hoffman
Prerequisites: successful completion of C3 Latin II (if student has not taken C3 Latin II, special permission is required to enroll in this class)
Tuition: $\$ 300.00$
Materials Fee: $\$ 25$ (additional purchase of workbook and Latin dictionary required)
Estimated Homework Time: 1 hour per day (or 4 hours per week)

This course centers on the study of Latin literature, primarily excerpts surveying Roman history from its beginnings through the fall of the Empire. The Latin text is primarily taken from authors Eutropius and [abridged accounts from] Livy, but also includes selections from more modern curricula Latin writers. To allow the students to place the Latin writings in context and to give a fuller picture of Roman history, each unit also includes short English readings from definitive texts, color images of the art and architecture of Rome with short explanations in the workbook, and links to educational videos - all of which are specially chosen and designed to bring the history to life. At the end of each of the three major time periods in Roman history, students will be assigned a project designed not only to deepen the students' grasp of the material and give the students an opportunity to present or write on topics of interest, but also to help them pull back from the details and place the historical events into the overarching story of this exciting and formative time in human history! Students and parents can expect that this year of Latin will largely be an opportunity to use all the grammar that they have already worked so hard to learn in Latin I \& II. There is little in the way of "new grammar", but rather this course offers a year to really solidify all that they have learned. Students will be challenged to read more difficult constructions, as Latin III is designed to be an excellent bridge to the more challenging Latin prose and poetry studied in Latin IV and V. As with all C3 Latin classes at this level, a parent is required to attend class with the student so that proper assistance can be given at home. Homework will require approximately one hour of focused Latin study every home study day, and students will likely need a great deal of parental monitoring and support.

## Latin V (AP)

## Jocelyn Robertson

Prerequisites: C3 Latin IV (if student has not taken C3 Latin IV, special permission is required to enroll in this class)
Tuition: $\$ 500.00$
Materials Fee: $\$ 25$ (additional book purchases required - see Booklist)
Estimated Homework Time: 5-6 hours per week

Students will read selections from two authors' works: Vergil's Aeneid and Julius Caesar's Commentaries on the Gallic Wars. This course is designed for students who have proven their grammar and translation skills in Latin IV and who are eager to continue their Latin studies and to prepare for the Latin AP exam in May. Students should engage in diligent daily study of $1-1.5$ hours a day. Through in-class discussions and frequent essays, students will learn the skills of analysis of the Latin text and continue to sharpen their translation skills. Parents are not required to attend this Latin class with their students. N.B. This class will be conducted live online; the day and time of the class to be determined in consideration of the students' and instructor's schedules.

## Progymnasmata I

## Cindy Leahy / Kelly Cabana / Janeen Acosta

Prerequisites: none
Ages: 12 \& older (11 yr olds may take Progym if they have successfully completed one year of C3 Latin) Tuition: \$400
Materials Fee: $\$ 70$ (covers all printed materials for this class)
Estimated Homework Time: 2-3 hours per week

Part one of a two-year course, this class is based on D'Angelo's Composition in the Classical Tradition. Progymnasmata (which means "preliminary exercises") is the ancient art and science of teaching the skills of writing. This curriculum is similar to The Institute for Excellence in Writing program, but more comprehensive in scope and also includes an introductory study of literary and rhetorical devices as well as an introduction to fallacies and techniques of persuasion. Over the two-year course, students are led step-by-step through eleven increasingly challenging genres of writing and will steadily build their writing proficiencies. Genres to be studied this first year include: narratives, descriptions, fables, proverbs, and anecdotes. The culminating skill is the crafting of carefully structured persuasive essays.

## Logic I: Socratic Logic

## Jason Robertson

Prerequisites: Progymnasmata II, or concurrent enrollment in Progymnasmata I
Ages: 13 \& up
Tuition: \$260.00
Materials Fee: $\$ 15.00$ (additional purchase of books required)
Estimated Homework Time: 3 hours per week

Socratic Logic is a two-year logic program that begins with the study of Formal Logic, the science of correct thinking. Formal logic looks at the form or structure of arguments, specifically the three acts of the mind: simple apprehension, judgment, and deductive inference. The class will consist of in-class lecture, group discussion, interactive activities, and written exercises to do at home during the week. In Socratic Logic I, students will complete Martin Cothran's Traditional Logic, Book I and begin Traditional Logic, Book II, which will be completed during the second year of this course. (After completing Traditional Logic, Book II, students in Logic II the following year will round out their logic studies using Peter Kreeft's text Socratic Logic, A Logic Text Using Socratic Method, Platonic Questions and Aristotelian Principles.)

## Rhetoric

## Kelly Cabana

Prerequisites: minimum of C3 Logic I, or the equivalent
Ages: 15 \& older
Tuition: $\$ 300.00$
Materials Fee: $\$ 5$ (additional book purchases required - see Booklist)
Estimated Homework Time: 2-3 hours per week

Rhetoric is considered the capstone of a classical education, which brings the other parts of a student's academic experience into a harmonious whole. In the "grammar stage", a student acquires the building blocks of knowledge. In the "logic stage," one practices with the pre-rhetoric genres of Progymnasmata and then learns the rules of abstract thought in Logic and begins applying them in each academic area. In the "rhetoric stage", students learn to write and speak with force and originality. The student of rhetoric applies the rules of logic to the foundational information gained in the early grades, builds on the skills
and attention to language developed in Progymnasmata, and learns to express his or her conclusions in clear, elegant, compelling language. More than a broad stage within the classical model applicable to all subject areas, the specific and carefully designed Rhetoric course offers students the opportunity to study "the greatest book on communication ever written", Aristotle's Rhetoric and Poetics, and apply the principles therein to analyze dozens of seminal speeches. They will also learn by doing - writing and presenting regular, peer-evaluated essays and speeches. The goal is to work towards a mastery of rhetoric (the art of persuasion) thereby equipping young scholars to go forth as persuasive, effective leaders in the home and church, the community and commerce, the nation, and the world.

## Omnibus III: Modern

## Cindy Leahy / Kelly Cabana

Prerequisites: none
Ages: 11 \& older
Tuition: $\$ 400.00$ (This class meets 3 times a month, for $11 / 2$ hours each session.)
Materials Fee: \$140* (includes all handouts and all books EXCEPT summer reading books)
Estimated Homework Time: 5 hours per week [expect extensive summer work for this particular Omnibus course in the cycle]
*Please note: The teacher purchases these books so everyone has the same edition and pagination. Book pickup will be at two centralized locations during the summer.

This is the third of a six-year series addressing the literature, history, and culture of major Western civilizations in chronological order. (We study ancients to medieval/renaissance to modern and then repeat the cycle with different literature.) Please note that students may join the Omnibus cycle at any year in the cycle; there is no prerequisite, though the Progymnasmata course is a good preparation. The ideal time to join this class is middle school or early high school. The course format will be a Paideia discussion (used in the Great Books program), which is based on close reading of literature and historical accounts. Readings will be excerpts chosen from key writings of the modern period. Students will read and discuss Fahrenheit 451, Paradise Lost, Huckleberry Finn, Gulliver's Travels, A Tale of Two Cities, and To Kill a Mockingbird, with mini-units on American poetry. The readings will be analyzed for themes, structure and style; the interrelation between history, literature, and culture will be emphasized. The goals of the Paideia approach are to build skills of inductive and deductive thinking through careful analysis of the text. The four major writing assignments will include two essays (a commonplace and a thesis) and two expressive writings, which will be speech-in-character papers. While the writing component may seem intimidating for younger students, all writings are genres of Progymnasmata, so most students will be familiar with their composition; additionally, while everyone will be able to do the speech-in-character assignments, those younger students who are not yet ready for the full essays will be encouraged to at least do the preparation for the essays and will receive class instruction for that purpose. Each full year of Omnibus is equal to one (1) high school English credit. Summer work will give the student a strong historical background to prepare for the literature read throughout the year.

## Omnibus VI: Modern

## Cindy Leahy

Prerequisites: Omnibus V or permission of instructor
Tuition: $\$ 400.00$ (This class meets 3 times a month, for $11 / 2$ hours each session.)
Materials Fee: \$180* (includes all books and handouts)
Estimated Homework Time: 6 hours per week
*Please note: The teacher purchases these books so everyone has the same edition and pagination. Book pickup will be at two centralized locations during the summer.

This is the final course of a six-year series addressing the literature, history, and culture of major Western civilizations in chronological order. (We study ancients to medieval/Renaissance to modern and then repeat the cycle with different literature.) Please note that students may join the Omnibus cycle at any year in the cycle pending instructor approval. The course format will be a Paideia discussion (used in the Great Books program), which is based on close reading of literature and historical accounts. Readings will be chosen from key writings of the modern period. Students will read and discuss Don Quixote by Cervantes; Faust by Goethe; Brothers Karamazov by Dostoyevsky; the essay-Henry David Thoreau; the novella—Daisy Miller by Henry James; British poetry—Gerard Manley Hopkins and W.B. Yeats; the short story-Flannery O'Connor, O. Henry, Eudora Welty \& James Thurber; The Great Gatsby by F. Scott Fitzgerald; modern drama-Thornton Wilder's Our Town. Summer reading will be The Autobiography of Benjamin Franklin. The readings will be analyzed for themes, structure, and style; the interrelation between history, literature, and culture will be emphasized. The four major writing assignments will include two major essays (two theses), a character analysis, and an expressive writing (an imitation of style). In order to more fully develop student writing skills, there will be class instruction and feedback via drafts for each writing assignment. Each full year of Omnibus is equal to one (1) high school English credit. This course leads to Advanced Placement English Literature and English Language \& Composition exams.

## AP English Exam Preparatory Seminar (late January - early April) <br> Cindy Leahy

Prerequisites: a background in Progymnasmata and Omnibus, or by teacher permission
Ages: 16 \& older
Tuition: \$200 for 6 three-hour sessions, meeting once a week (please reserve Monday afternoons)
Materials Fee: \$50
Estimated Homework Time: 4 hours per week for the six weeks of class

An intense preparatory class for students intending to take the Advanced Placement (AP) English Language \& Composition and/or the AP English Literature exams. These exams are an excellent way for students who have had several years of Progymnasmata and Omnibus to validate their transcripts for colleges and to possibly earn 3-6 college credits and avoid having to take freshman English. Coursework will include: a thorough overview to exams and test-taking strategies; review of rhetorical terminology; introduction to (and group analysis of) the seven types of questions; and essay-writing practice in a timed and formal setting.

## ADDITIONAL LANGUAGES:

In addition to Latin, this year we offer Greek and Spanish. These classes offer further opportunities for our students and can serve to fulfill foreign language requirements on a high school transcript.

## Greek 1/3

Molaika Beer
Prerequisites: completion of Latin I ( $3 / 3$ or $2 / 2$ ) recommended
Ages: 12 \& older
Tuition: $\$ 280.00$
Materials Fee: $\$ 20$ (additional book purchases required - see Booklist)
Estimated Homework Time: 4 hours per week

A beginner's class in Ancient Greek! Start the journey to reading classic, ancient texts like Homer and Plato, as well as the Greek New Testament, in their original language. Students should expect a rigorous but rewarding course, where daily review of vocabulary, charts, and grammar is essential to the attainment of reading fluency. Through diligent study of the rudiments of the language, students give themselves access to some of the most radiant, profound, and influential texts of human culture. Preparatory work in learning the Greek alphabet and a few aspects of pronunciation must be done in the weeks leading up to the fall semester. The instructor will provide materials needed to do this preliminary work. Parents are always welcome, but not obligated, to attend the class.

## Greek 3/3

Molaika Beer
Prerequisites: successful completion of Greek $2 / 3$
Ages: 12 \& older
Tuition: $\$ 280.00$
Materials Fee: $\$ 20$ (additional book purchases required - see Booklist)
Estimated Homework Time: 4 hours per week

Students in this course will encounter the remaining forms of the Greek verb, new vocabulary, and many of the advanced grammatical constructions. This level of Greek study is marked by an ever-improving ability to read excerpts from ancient Greek literature, in particular the historians Herodotus and Thucydides, as well as the Greek New Testament. This class requires one hour of focused study a day. Parents are always welcome, but not obligated, to attend class.

## Spanish I

## Charles Presberg

## Prerequisites: none

Ages: 12 \& older
Tuition: \$260.00

Materials Fee: \$20 (book acquisition [free online] required - see Booklist)
Estimated Homework Time: 2-3 hours per week

Through a variety of both oral and written exercises, students develop all four language skills in the target language: speaking, writing, as well as spoken and written comprehension. These exercises - all high-energy - include reading aloud selected passages, written and spoken translation from both English to Spanish and Spanish to English, performing spoken dialogues, and practice in both reading and writing. By the end of the cycle of two years, students will master the Spanish system of phonetics and phonology, learn the entire grammar system, and acquire a vocabulary service list of approximately 620 words.

## Spanish II

## Charles Presberg

Prerequisites: completion of Spanish I
Ages: 12 \& older
Tuition: \$260.00
Materials Fee: \$20 (book acquisition [free online] required - see Booklist)
Estimated Homework Time: 2-3 hours per week

Through a variety of both oral and written exercises, students develop all four language skills in the target language: speaking, writing, as well as spoken and written comprehension. These exercises - all high-energy - include reading aloud selected passages, written and spoken translation from both English to Spanish and Spanish to English, performing spoken dialogues, and practice in both reading and writing. By the end of the cycle of two years, students will master the Spanish system of phonetics and phonology, learn the entire grammar system, and acquire a vocabulary service list of approximately 620 words.

## HISTORY / SOCIAL SCIENCES:

For high school students, we offer American History and a two-year History of Western Civilization course series, to be taken in any order. MS History is for middle school students. Also offered this year are two additional classes in the broader social sciences: World Geography and Civics.

MS History (middle school): Renaissance to Modern

## Kacky Kasinski

Prerequisites: none
Ages: 11-13
Tuition: \$260.00
Materials Fee: $\$ 40$ (covers all printed materials for this class)
Estimated Homework Time: one hour or less per week

This class will begin with the late 1700 s in North America and will move quickly through to the millennium examining major figures and events each week. We will look at explorations, discoveries, wars, inventions, and advancements, by watching key figures change the course of history and culture. We will make an interactive notebook that will include notes, foldables, maps, and more - similar to lapbook style. Students will be expected to write notes from the board during class and follow directions on making the interactive notebook. Homework will involve finishing any work leftover from class or completing any special units. There will be one required presentation done by each student - a book report of sorts (more details to come; the book choices will be easily found at a library). The Materials Fee covers the cost of photocopying, paper, copying licenses, and other supplies. There is no required book to be purchased.

## History of Western Civilization II: Medieval \& Modern European Daniel LaPré

Prerequisites: none
Ages: 14 \& older
Tuition: \$260.00
Materials Fee: $\$ 45$ (additional purchase of textbook required unless a student has already taken History of Western Civilization I; the same text is used for both courses in this series - see Booklist)
Estimated Homework Time: 3-4 hours per week

This course covers the history of Europe from the high middle ages of the 1200's to the modern period. Although the major events, personalities, and themes of European civilization are covered, this course is most focused on the history of the English within Western Civilization since it is the most direct influence and heritage of the United States. Major topics will include Medieval Christianity, the Hundred Years War, King Edward I of England, the Black Death, Columbus and the Age of Exploration, the English Civil War, the Wars of Religion, the Enlightenment, the French Revolution, Napoleon, the Industrial Revolution, English colonies in America, the American Civil War, the rise of Germany and Italy, WW I, the Depression, WW II, and the Cold War. Each week students will have a weekly reading assignment with a study guide to be completed before class and to be used for our class discussions.

## American History

## Jill Hummer

Prerequisites: none
Ages: 14 \& older
Tuition: $\$ 260.00$
Materials Fee: $\$ 20$ (additional book purchases required - see Booklist)
Estimated Homework Time: 4-5 hours per week

This course covers the history of the American people from the late 16th to the early 21 st century. Topics include colonial America, American Revolution and early republic, westward expansion and Jacksonian democracy, Civil War and Reconstruction, industrial America and the Progressive Era, melting-pot America and World War I, New Deal and World War II, post-war America and the civil rights movement,
the Reagan revolution and the war on terror. In addition to a history core text - primary sources, foundational documents, great speeches, and classic works will also be read and analyzed.

## World Geography

Janette Cascio

Prerequisites: basic knowledge of maps and continents
Ages: 12 \& older
Tuition: $\$ 260.00$
Materials Fee: $\$ 30$ (additional book purchase required - see Booklist)
Estimated Homework Time: 1-2 hours per week

This is an advanced geography class that focuses on the locations of countries, states, provinces, islands, major cities, bodies of water, mountains, and other physical features. Students will gain cultural geographic knowledge to help understand the diverse world in which we live and will explore the unique characteristics of each continent. Natural and manmade disasters will also be addressed especially in view of current events. A basic knowledge of maps and continents is expected. The instructor will provide information over the summer that students will be expected to know the first day of class. Homework will focus primarily on labeling maps.

## Civics

## Nancy Juday

Prerequisites: none
Ages: 13 \& older
Tuition: \$260.00
Materials Fee: $\$ 45$ (teacher will provide all materials, including text if used)
Estimated Homework Time: 3 hours per week

The Civics course will reveal the American Republic to students (including the people and our history), through the study of citizenship, the law, public policy, and political parties and interest groups. There will be an emphasis on the Declaration of Independence and the U.S. Constitution, including the Bill of Rights and Amendments 11-27, and a study of the three branches of government. The curriculum used in this course is Hillsdale College's K-12 American Classical Education 1776 Curriculum, whose aim is to help students gain an understanding of American history and of the American republic as governed by the Constitution and morally grounded in the Declaration of Independence.We strongly recommend that students planning to take (AP) U.S. Government \& Politics complete Civics first in preparation.

## MATHEMATICS:

Math classes offered this year are Pre-Algebra, Algebra I, Algebra II, and Geometry. Due to the nature of the subject matter, math classes are held twice a week - on Tuesdays (live-stream class online, times may vary) and on Fridays (in person at C3).

## Pre-Algebra

## Bob Carhart

Prerequisites: completion of Math 7
Ages: 12 \& older
Tuition: \$500.00*
Materials Fee : \$40 (additional purchase of textbook required - see Booklist)
Estimated Homework Time: 3-4 hours per week
N.B. A successful student entering Pre-Algebra will be familiar with multiplication facts 1-12. Students must be cognitively ready to leave the elementary math mindset and start embracing symbols and structure as a natural growth step towards high school mathematics. If unsure of your student's readiness, contact the teacher for an evaluation.

This rigorous, hands-on, intensive mathematics course begins the transition from rote arithmetic to higher level mathematics in preparation for the formal study of Algebra I. Students will be introduced to the concept of definition in mathematics, sets and set operations, operations on real numbers and their properties (including integers and integer operations), variables and equation solving, place value and alternate number bases (we cover alternate bases to remove the student from their familiar Base 10 and truly understand the concept of place value), basic inequalities, number line models for various topics, prime and composite numbers, factoring and simplification, the Fundamental Theorem of Arithmetic, rational numbers and fractions, ratio, proportion, percentage, distance and absolute value, the concept of average, introduction to mathematical modeling, understanding and solving word problems, probability and elementary statistical analysis, measurement and precision, and geometry and graphing/display techniques. This is a first course in beginning to think of mathematics structurally and not just in terms of specific numeric computations. (Although there is a significant amount of computation involved in the class.) Homework packets are assigned after each class. Unit tests are given (often with a take-home portion and an in-class portion) for each of the units. For parents desiring a grade for their student in the class, these tests will provide the basis for determining a grade; quizzes are also given to gauge progress. Students are actively engaged during in-class lectures through board work, group work, seated work, and lecture.

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#### Abstract

Algebra I Jen Wright Prerequisites: Pre-Algebra or Math 8 Ages: 13 \& older Tuition: \$500.00* Materials Fee: $\$ 25$ (additional purchase of textbook required - see Booklist) Estimated Homework Time: 3-4 hours per week


N.B. Students not currently enrolled in the C3 Pre-Algebra class may be required to take an entrance exam to verify readiness for the course.

The following topics will be covered in this course: order of operations, real numbers and their operations, distributive property, solving linear equations, functions, ratios, graphing lines, direct variation, solving and graphing inequalities, linear systems, exponents and operations, radical expressions, quadratics, polynomials and factoring, and the Pythagorean theorem.
*This class meets twice per week. Classes will be held on Tuesdays (online via Zoom) and Fridays (in person) at C3. Each class will be $1 \frac{1}{2}$ hours for a total of 3 hours instruction time per week. Additional tutoring provided as needed for an additional hourly charge.


#### Abstract

Algebra II Prerequisites: Algebra I \& Geometry (exceptions to the Geometry prerequisite must be pre-approved by the instructor prior to registration; see additional note below) Ages: 14 \& older Tuition: \$500.00* Materials Fee: $\$ 25$ (additional purchase of textbook required - see Booklist) Estimated Homework Time: 4-5 hours per week


Jen Wright

The following topics will be covered: equations and inequalities, functions, absolute value, solving systems in two or three variables, matrices, graphing and solving quadratic equations, complex numbers and radical (irrational) numbers, exponents and their properties, finding rational zeros of polynomials, rational exponents, inverse functions, exponential and logarithmic functions, direct/inverse variation, rational functions, conics (circles, ellipses, hyperbolas), probability, statistics, and series and sequences.
N.B. Students not currently enrolled in the C3 Geometry class may be required to take an entrance exam to verify readiness for the course.
*This class meets twice per week. Classes will be held on Tuesdays (online via Zoom) and Fridays (in person) at C3. Each class will be $11 / 2$ hours for a total of 3 hours instruction time per week. Additional tutoring provided as needed for an additional hourly charge.

## Geometry

Bob Andreoli
Prerequisites: Algebra I
Ages: 12 \& older

Tuition: \$500.00*
Materials Fee: $\$ 10$ (additional purchase of textbook required - see Booklist)
Estimated Homework Time: 4-6 hours per week

This course emphasizes deductive Euclidean geometry in two and three dimensions. Course topics will include: logical systems; the nature of formal proof; distance and betweenness; lines and planes; angles and triangles; congruence; parallelism and perpendicularity; geometric inequalities; similarity; area; circles and spheres; coordinates; and solids and volumes.
*This class meets twice per week. Classes will be held on Tuesdays (online via Zoom) and Fridays (in person) at C3. Each class will be $1 \frac{1}{2}$ hours for a total of 3 hours instruction time per week.

## SCIENCE AND OTHER STEM CLASSES:

We offer two middle school science classes this year: Natural History (on Thursdays) and Life Science (on Fridays). At the high school level, Chemistry and Human A\&P are offered. In addition, we offer Computer Science, which students may begin in late middle school; Computer Science may fulfill a math, science, or fine arts/career credit on a high school transcript, per the Advanced Studies Diploma Course Requirements as determined by the Virginia Department of Education.

## Natural History

Anna Hatke
Prerequisites: none
Ages: 12-14
Tuition: $\$ 280.00$ (this class meets 3-4 times a month, for $11 / 2$ hours each session)
Materials Fee: $\$ 45$ (additional purchase of two books required - see Booklist)
Estimated Homework Time: 1-2 hours per week

Natural History is the practice of focused attentiveness to the natural world, guided by honesty and accuracy along with the search for patterns and relations in nature. Through lectures, discussion, and nature journaling students will be trained to engage their senses in observation of the world and broaden their own understanding of the world around them. Lectures will follow the lives and discoveries of major scientists throughout history and the development of the plant and animal life through the fossil record with particular emphasis upon Virginia geology, flora, and fauna., laying an excellent scaffold for understanding biology. There will be outdoor field journaling as well as a lab component to the class in which students will become conversant in the John Muir Laws method for nature journaling. Specimens will be brought into the classroom for observation, in the nineteenth-century tradition of the object lesson. Homework will involve nature journaling and reading assignments. This course is designed as a freshman level science course but is approachable for younger students as well.

## Life Science

## Kacky Kasinski

Prerequisites: none
Ages: 12-14
Tuition: $\$ 375.00$ (this class meets for $1 / 1 / 2$ hours on Fridays)
Materials Fee: $\$ 50$ (additional purchase of inexpensive textbook required - see Booklist)
Estimated Homework Time: 1-2 hours per week

This course is designed to give students an overview of common topics in Life Science including heredity, living organism diversity, cell structure and division, ecosystems, and the human body. This course is an excellent foundation for biology. Students will be required to do weekly homework assignments and quizzes. There will be one oral presentation that students will work to prepare over the course of several weeks. Students will also take part in labs that are designed to bring concepts together through observation and hands-on experience. We will do several dissections. The materials fee will cover lab specimens and other lab supplies.

## Computer Science I

## Bob Carhart

Prerequisites: completion of Pre-Algebra
Ages: 13 \& older
Tuition: $\$ 260.00$
Materials Fee: $\$ 35$ (additional purchase of textbook required and students will need a laptop computer) Estimated Homework Time: 2-4 hours per week (less at the start of the year, more at the end)

A standard, rigorous introduction to computer science, this course focuses on how computers are used in business, government, and society to solve challenging problems and provide useful applications. From the first class meeting, the course has a programming focus with Python as the language of instruction. Progressively through the year, students broaden and deepen their knowledge of fundamental programming concepts, including flow of control, loop and decision structures, variables, data types, operations, functions (sub-programs), input-output, plus the concepts of data abstraction and object-oriented programming. In the second half of the year, students are briefly introduced to the C programming language in order to draw contrast between syntax, semantics, and the richness, size, and utility of a programming language. At a high level, we study the language spoken by computers, including binary numbers, expression of character data, and hexadecimal expression of sequences of bits. Students emerge with a solid basic understanding of the Python language and will write several small programs each week outside of class. There is one larger project towards the end of the year. A laptop is required for both in-class use and for the assignments done at home. Students work on laptops every class for nearly the entire class. An internet connection is required, as we use the cloud programming environment for Python called 'repl.it.' Students who succeed in the course generally have a solid interest in programming and a sincere interest in learning true computer science. A computer science course, while certainly building a practical skill set for today's world, can also serve to fulfill a number of requirements for the Virginia Advanced Studies Diploma. Computer Science can provide required course credit in mathematics, the sciences, or fine arts/career and technical subject areas.

## Computer Science II

Bob Carhart
Prerequisites: completion of Computer Science I
Ages: 13 \& older
Tuition: \$260.00
Materials Fee: $\$ 40$ (additional purchase of textbook required, same book as Computer Science I, and students will need a laptop computer)
Estimated Homework Time: 4 hours per week

Continuing on the foundations built in Computer Science I with the Python language, this class develops the students' skill with object orientation, creation of Python classes from scratch, intermediate data structures, and recursive flow of control. The method of instruction centers on writing programs in class, with 2-3 hours of additional programming at home each week. Students will complete several projects throughout the year, including card games and adaptations of famous video games and board games. A light introduction to advanced Python libraries, including numerical Python and vectorization, will also be covered in this course. (This is not an AP course.)

## Chemistry with Lab

## Jen Wright

Prerequisites: Algebra I
Ages: 15 \& older
Tuition: $\$ 450.00$ (this class meets for 2 hours on Fridays)
Materials Fee: $\$ 150$ (includes interactive virtual lab license \& general class materials; an inexpensive textbook and a workbook are the only additional costs - see Booklist)
Estimated Homework Time: 4-5 hours per week

Topics to be covered include scientific measurement, matter and its changes, atomic structure, the periodic table, ionic, covalent and metallic bonding, chemical names and formulas, reactions, stoichiometry, solutions, thermochemistry, acids, bases, salts and oxidation-reduction reactions. The lab component will be almost entirely virtual with a one (1) year software license for Labster included in the materials fee. Students must have a computer which can run the interactive virtual labs (cell phones and tablets are insufficient; hardware requirements available from the teacher upon request.) The virtual lab format* is well-suited for C3 chemistry since we are unable to utilize open flames or caustic chemicals at our host facility. Students will be asked to submit lab reports as part of their grade. Having most labs performed virtually at home allows class time to be better utilized for instruction, practice problems, and individual help with what can be challenging material. Some simple hands-on labs will be performed in class, as well as demonstrations and activities to aid comprehension.
*Teacher's note on the interactive virtual lab component: Having done several of the interactive labs myself, I feel they are an effective way to simulate actual lab work and will probably aid with understanding, since feedback is immediate and gently guides students to come to the correct conclusions.

## Human Anatomy and Physiology with Lab

Jamie Brock
Prerequisites: high school Biology highly recommended
Ages: 15 \& older
Tuition: \$450.00
Materials Fee: $\$ 95$ (includes printing, dissection kits \& specimens, and lab supplies; additional purchase of textbook \& student workbook required - see Booklist)
Estimated Homework Time: 3 hours per week

This course will focus on examining the histology, anatomy, and physiology of the human body. Students will study the systems of the body, with lab dissections providing hands-on experience and reinforcement of class content. Labs will include a fetal pig dissection (specimen must be taken home in-between classes) and other specimens for lab dissection in class. While this class is an important follow-up to Biology, the pace will be less intense.

## ARTS \& COMMUNICATIONS:

The following courses offer students valuable learning opportunities to enrich or support a classical education. This year they include Chorale Singing, Practical Arts, Drama, and Studio Drawing.

## Chorale: Fundamentals of Choral Singing

## Sofia Cuddeback

Prerequisites: none
Ages: 12 \& older (11-year-olds may take the class if they took Sing for Joy last year)
Tuition: \$260.00
Materials Fee: \$30
Estimated Homework Time: 2-3 hours per week

The purpose of this course is to give its participants the joyful experience of group singing in unison and in parts. This course will develop ear training through aural memorization and repetition in class, and the Ward method will be used to teach solfege as a transition to rudimentary sight singing. The course will use English and American folk music, rounds, Negro spirituals, Latin chant and polyphony, and will particularly focus on Christmas carols in the first semester. Homework will consist in completing weekly written assignments, vocal exercises, and memorization of lyrics and musical parts (recordings of parts will be provided for this via email attachments as well as printed sheet music when applicable). Homework requirement is $30-45$ minutes daily. Progress in the class (as well as gaining fluency and thus enjoyment in singing) is entirely dependent on the regular, consistent completion of homework. No previous singing or choral experience needed - only a good attitude! This course utilizes different songs and pieces each year and, as such, is appropriate for repeat enrollment.

## Practical Arts

Clare Marmalejo
Prerequisites: none
Ages: 13 \& older
Tuition: $\$ 280.00$ (this class meets $3-4$ times a month, for $1 \frac{1}{2}$ hours per session)
Materials Fee: $\$ 65$ (this will cover the cost of various materials for projects within each unit)
Estimated Homework Time: minimal

The goal of this class is exposure to, and instruction in, practical life skills. The inspiration for the curriculum comes from the educational philosophy of Charlotte Mason, and it is also an effort to give our students the opportunity to study (albeit for a brief period) under local tradesmen, homemakers, and other skilled individuals. The lead teacher will present a number of different topics, but will also arrange for guest instructors. Possible unit themes may be: beekeeping, gardening, farming, chicken brooding, cooking, household management and maintenance skills, clothing care and repair, woodworking, traditional food preservation, wellness modalities, home remedies, CPR \& First Aid, small business ideas, and car maintenance and repair. (These are subject to change based on instructor availability and logistics.) Homework will involve occasional weekly readings (15-20 minutes in length) related to the topics covered and possible completion of - or preparation for - class projects. Periodic field trips to nearby locations will be worked into the schedule during class times (e.g. visiting a local restaurant, orchard, or rescue squad, etc.). These projects and outings may require a small commitment of assistance and/or driving to and from the alternative location by the responsible parent/guardian.

## Drama

Haley Schmid
Prerequisites: none
Ages: 12 \& older
Tuition: $\$ 300.00$
Materials Fee: $\$ 50$
Estimated Homework Time: 2-3 hours per week (primarily line and blocking memorization)

This immersive, performance-based course offers students an enriching and robust drama-club experience. Participants can expect to learn by memorizing, internalizing, and delivering dramatic roles before a live audience in the collaborative context of one staged production per year. The 2025 Classical Cottage production will be Oscar Wilde's The Importance of Being Earnest. Course aims include instilling a foundational appreciation for the literary richness of 19th century British drama, increasing textual/linguistic and elocutionary competency and confidence, and gaining an integral understanding of stage-acting.

## Studio Drawing

Agnes Wingate
Prerequisites: none
Ages: 12 \& older
Tuition: $\$ 280.00$ (this class meets 3-4 times a month for $11 / 2$ hours each session)

Materials Fee: $\$ 40$ (covers art supplies: notebook, pencils, erasers, some prints, and set up items)
Estimated Homework Time: 1 1/2 hours per week

This course will consist of learning the basics of realistic drawing. In each class students will be expected to work on pencil drawings of still life setups with guidance and critiques. The course will cover the basic elements of drawing, beginning with ideas such as composition, proportion, angle, shape, and gesture. Each class will begin with a discussion of one of the many aspects of beginning, working on, and completing a realistic drawing. The discussion will be followed by hands-on drawing practice with critiques. The second half of the year will consist of more advanced drawing principles such as mass drawing, form, shadow line, shadows, and edges. Students will draw primarily from life, though some drawing will be done from photographs for homework. Each week, students will be given a short drawing assignment for homework, as well as a reading which will accompany and reinforce the aspect of drawing discussed during class.

## OTHER ELECTIVES:

These classes include America's Christian Heritage (an enrichment class formerly called "American Stories"), Introduction to Philosophy, Yearbook, and two new one-semester courses - one on the Presidential Election, and the other, History of Military Art \& Science; these last two classes may be taken in isolation (one and not the other), or in succession, one in first semester and then the other, second semester.

## The Presidential Election

## Jill Hummer

Prerequisites: none
Ages: 14 \& older
Tuition: $\$ 130.00$ (one-semester class, Sept.-January*)
Materials Fee: $\$ 15$ (additional purchase of textbook required - see Booklist)
Estimated Homework Time: 2 hours per week

This course covers the presidential election process in the United States. Topics include the primaries, political parties, conventions, Electoral College, campaign strategy, advertising and media, voting methods and Election Day, transition, and inauguration. The course will highlight both presidential election history and the 2024 contest.
*If a student enrolled in The Presidential Election is not taking the second-semester course, History of Military Art and Science, she/he should be enrolled in Study Hall for the second semester (or with their parent), when this class concludes.

## History of Military Art and Science

Marcus Acosta
Prerequisites: none
Ages: 14 \& older
Tuition: $\$ 130$ (one-semester class, Feb.-May*)
Materials Fee: $\$ 35$ (additional purchase of textbook required - see Booklist)
Estimated Homework Time: 3 hours per week

This course traces the evolution of the art and science of warfare. General concepts are introduced to establish a foundation for analysis and understanding of war as a complex and unpredictable human phenomenon. Students gain an appreciation for the fundamental principles of war and identify elements of continuity and change. Analysis of the conduct of battle focuses on war during the Napoleonic era, the American Civil War, mechanized warfare of the 20th century, and the contemporary use of military force.
*If a student enrolled in History of Military Art and Science is not taking the first-semester course, The Presidential Election, she/he should be enrolled in Study Hall for the first semester (or with their parent).

## America's Christian Heritage <br> Bernie Beall

## Prerequisites: none

Ages: $12 \&$ older (younger children age 11 may take the class at the discretion of the parents)
Tuition: \$260
Materials Fee: \$20
Estimated Homework Time: No homework is required for this class.

With lots of enthusiasm and fascinating detail, Rev. Beall shares hundreds of stories that emphasize America's unique Christian heritage, doing so in the classroom as if we are actually "on site with spiritual insight!" This class offers virtual visits (an in-person classroom experience with an engaging "tour guide") to major historical sites in the greater Washington, DC area to learn the stories and first-hand accounts of our national heritage. Using powerpoints, flags, gospel fliers, large photo cards, and dozens of handouts with scores of Bible verses, we plan to 'visit' the following locations: DC monuments, Smithsonian museums, U.S. Capitol, Museum of the Bible, Arlington National Cemetery, National Archives, National Cathedral, National Basilica of the Immaculate Conception, U.S. Supreme Court, Library of Congress, White House, Jefferson's Monticello, Harpers Ferry, C\&O Canal, Manassas Battlefield, Antietam Battlefield, Gettysburg Battlefield, and more. Parents are encouraged to attend. Come enjoy and engage with the American Christian heritage that surrounds us!

## Introduction to Philosophy

## Charles Presberg

Prerequisites: Logic is the perfect precursor to Philosophy, but is not required.
Ages: mature 15-year-olds \& older
Tuition: \$375.00

Materials Fee: $\$ 20$ (additional book purchases required - see Booklist)
Estimated Homework Time: 3 hours per week

Students enroll in this course to join a family that Peter Kreeft calls "Socrates's children." They will learn what thinkers from Socrates to the present have expressed about philosophy's great questions-truths about God, man, and the world. To do so, they will pursue philosophy less as a subject than as an art, a lifelong quest for truth. They will study authors who practice philosophy in a Socratic spirit of humility and dialogue. Through these authors - outstanding examples of Socrates's children - students learn to think with a sense of awe about the harmonious truths of reason, revelation, and the arts. Students will read, discuss, and write short essays about the assigned texts. Each semester, they also complete one research paper of eight pages (MLA format) on a topic approved by the instructor. Over the summer, students should read all three volumes of J.R.R. Tolkien's Lord of the Rings.

## Yearbook

## Leila Robertson

Prerequisites: only a desire to work on the C3 yearbook
Ages: 14 \& older
Tuition: \$260.00
Materials Fee: \$25
Estimated Homework Time: 1 hour per week
Creating the C3 Yearbook will be a team effort giving each student an opportunity to work on a year-long project while collaborating with fellow classmates. The students will learn how to set and meet long-term deadlines while managing the different aspects of a larger project. They will practice communication skills, solve problems, and grow in leadership. Students will learn about photography, take pictures, edit pictures, design pages, create layouts, journal about events, and edit the final product. Budgeting, advertising, and marketing (in relation to the yearbook) will also be covered as part of the larger project. Most of the yearbook will be created during class time, however, from time to time, students will be involved in taking photos during the day at C3 and during C3 activities. Students will require a laptop computer and access to the internet (wifi) during class and at home. They will be working on the yearbook site Entourage while creating their portion of the yearbook. Each participating student will receive a free copy of the yearbook at the completion of the project. Most importantly, the students will work together to create a final product which will capture the year and be enjoyed by many others for years to come.

## Study Hall

Fee: $\$ 20.00$ (one-time fee, for the year)

Study Hall is intended for students who are mature enough to sit and work independently for an entire hour. They must bring enough work to occupy their time and must understand that Study Hall is not a social hour. Our Study Hall monitors do not assist with schoolwork. Study Hall is offered throughout the
day as long as space is available. While on campus, Upper Level students must either be in class, in Study Hall, or with a parent. Students are required to register for Study Hall as with all other classes, and students are limited to no more than one Study Hall per Thursday and/or Friday class day. If an additional Study Hall is desired, parents will need to seek an exception from the Board prior to registering.


[^0]:    *This class meets twice per week. Classes will be held on Tuesdays (online via Zoom) and Fridays (in person) at C3. Each class will be $11 / 2$ hours for a total of 3 hours instruction time per week. Additional tutoring provided as needed for an additional hourly charge.

